

Amendments to the Claims:

Please replace the claims with the following listing of claims.

1. (Currently Amended) ~~For a database management system to be operatively coupled to a data processing system, a~~ A computer-implemented method for optimizing compression of a workload comprising a plurality of queries, the computer-implemented method comprising:

estimating a cost to execute ~~the~~ each query within a plurality of queries of a workload;

selecting a sub-set of queries from the workload according to a threshold level, the threshold level being a function of the total estimated cost to execute all the queries of the workload; and

compressing the selected sub-set of queries.

2. (Currently Amended) The computer-implemented method of claim 1 ~~the step of wherein~~ selecting includes selecting from the queries in decreasing estimated cost of execution rank order such that an aggregate estimated cost of execution for the selected queries is less than or equal to the threshold.

3. (Currently Amended) The computer-implemented method of claim 1 wherein the cost of execution is a function of a parameter selected from the group consisting of estimated execution time of ~~a~~ each query, amount of computer memory required for execution of ~~a~~ each query, amount of I/O usage required for execution of ~~a~~ each query, amount of CPU utilization required for execution of ~~a~~ each query, and throughput contribution required for execution of ~~a~~ each query and combination thereof.

4. (Currently Amended) The computer-implemented method of claim 3 wherein the cost of execution is a function of ~~any of one or more of:~~

a frequency/weighting component associated with each query;

an estimated time of execution for each query;

an amount of computer memory required for execution of ~~a~~ each query;

an amount of I/O usage required for execution of a each query;
an amount of CPU utilization required for execution of a each query; and,
an amount of throughput contribution required for execution of a each query.

5. (Currently Amended) The computer-implemented method of claim 1 wherein the threshold is derived from ~~any of one or more of~~:

a percentage of a total execution time of the workload;
an allotted execution time for the workload;
a determination made by applying successive approximations techniques; and
a determination made when an allotted threshold selection time has been reached.

6. (Currently Amended) The computer-implemented method of claim 1 wherein ~~the step of~~ selecting further ~~comprising~~ comprises sub-dividing the plurality of queries into groups of queries based upon query types wherein the threshold applied to a group of queries is a percentage of a total estimated cost of execution for the group of queries.

7. (Currently Amended) The computer-implemented method of claim 6 wherein the threshold applied to a group of queries is derived from an allotted execution time for the group of queries.

8. (Currently Amended) ~~For a database management system to be operatively coupled to a data processing system, a~~ A computer program product comprising a computer readable medium tangibly embodying computer executable code for optimizing compression of a workload comprising a plurality of queries, the computer programmed product ~~further~~ comprising:

code for estimating a cost to execute each query within a plurality of the queries of a workload;

code for selecting a sub-set of queries from the workload according to a threshold level, the threshold level being a function of the total estimated cost to execute all the queries of the workload; and

code for compressing the selected sub-set of queries.

9. (Original) The computer programmed product of claim 8 wherein the code for selecting includes selecting from the queries in decreasing estimated cost of execution rank order such that an aggregate estimated cost of execution for the selected queries is less than equal to the threshold.

10. (Currently Amended) The computer programmed product of claim 8 wherein the cost of execution is a function of ~~any of~~ one or more of:

a frequency/weighting component associated with each query;

an estimated time of execution for each query;

an amount of computer memory required for execution of a query;

an amount of I/O usage required for execution of a query;

an amount of CPU utilization required for execution of a query; and,

an amount of throughput contribution required for execution of a query.

11. (Currently Amended) The computer programmed product of claim ~~8~~ 4 wherein the threshold is derived from one or more ~~any~~ of:

a percentage of a total execution time of the workload;

an allotted execution time for the workload;

a determination made by applying successive approximations techniques; and

a determination made when an allotted threshold selection time has been reached.

12. (Original) The computer programmed product of claim 8 wherein the step of selecting further comprising sub-dividing the plurality of queries into groups of queries based upon query types wherein the threshold applied to a group of queries is a percentage of a total estimated cost of execution for the group of queries.

13. (Original) The computer programmed product of claim 12 wherein the threshold applied to a group of queries is derived from an allotted execution time for the group of queries.

14. (Currently Amended) For a database management system to be operatively coupled to a data processing system, a workload compression system for optimizing compression of a workload comprising a plurality of queries, the workload compression system comprising:

means for estimating a cost to execute each query within a plurality of the queries of a workload;

means for selecting a sub-set of queries from the workload according to a threshold level, the threshold level being a function of an estimated total cost to execute all the queries of the workload; and

means for compressing the selected sub-set of queries.

15. (Original) The workload compression system of claim 14 wherein the means for selecting includes selecting from the queries in decreasing estimated cost of execution rank order such that an aggregate estimated cost of execution for the selected queries is less than equal to the threshold.

16. (Currently Amended) The workload compression system of claim 14 wherein the cost of execution is a function of ~~any of one or more of~~:

a frequency/weighting component associated with each query;

an estimated time of execution for each query;

an amount of computer memory required for execution of a each query;

an amount of I/O usage required for execution of a each query;

an amount of CPU utilization required for execution of a each query; and,

an amount of throughput contribution required for execution of a each query.

17. (Currently Amended) The workload compression system of claim 14 wherein the threshold is derived from ~~any of one or more of~~:

- a percentage of a total execution time of the workload;
- an allotted execution time for the workload;
- a determination made by applying successive approximations techniques; and
- a determination made when an allotted threshold selection time has been reached.

18. (Currently Amended) The workload compression system of claim 14 wherein ~~the step of selecting further comprising~~ comprises sub-dividing the plurality of queries into groups of queries based upon query types wherein the threshold applied to a group of queries is a percentage of a total estimated cost of execution for the group of queries.

19. (Original) The workload compression system of claim 18 wherein the threshold applied to a group of queries is derived from an allotted execution time for the group of queries.